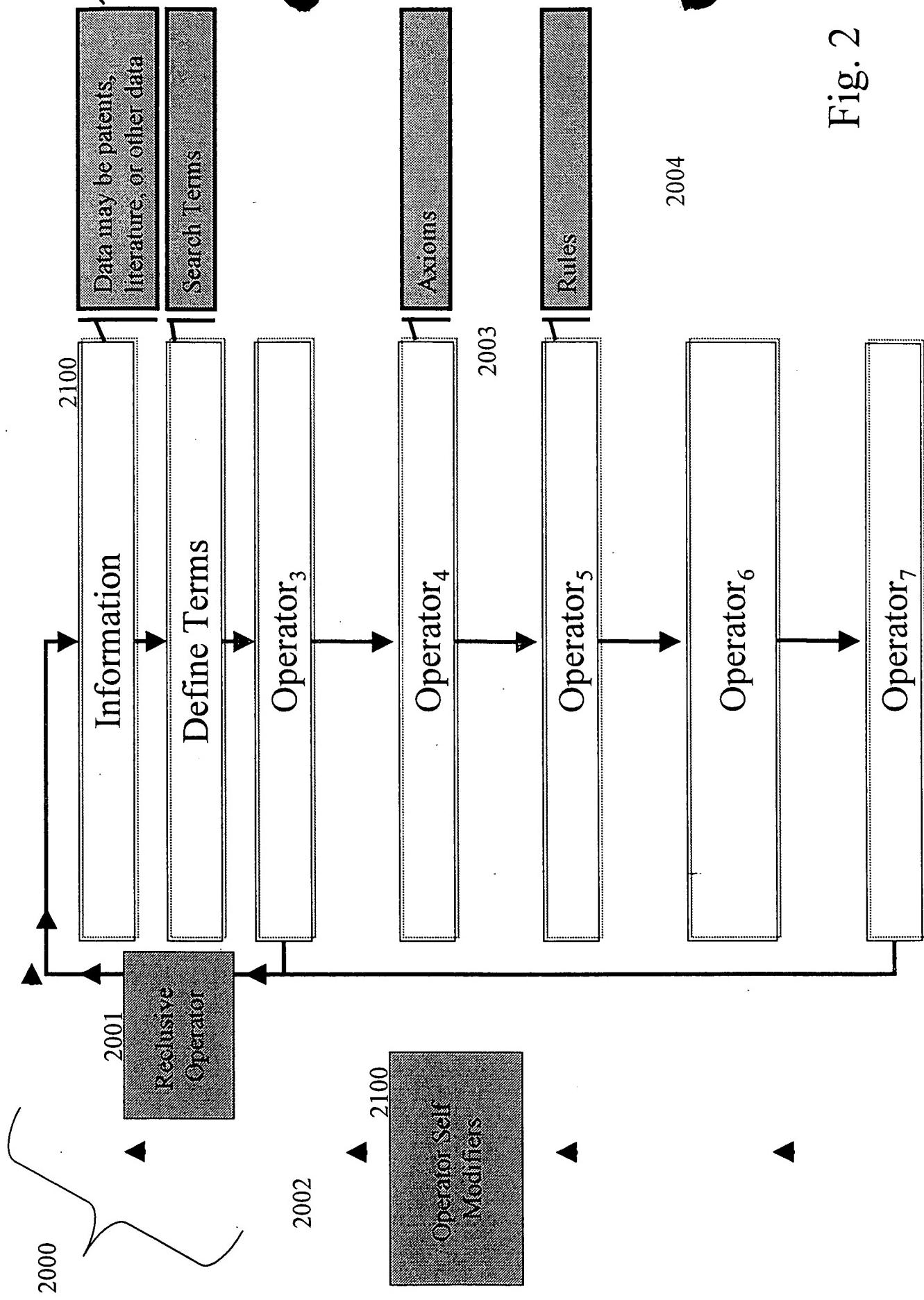


Fig. 1

Fig. 2



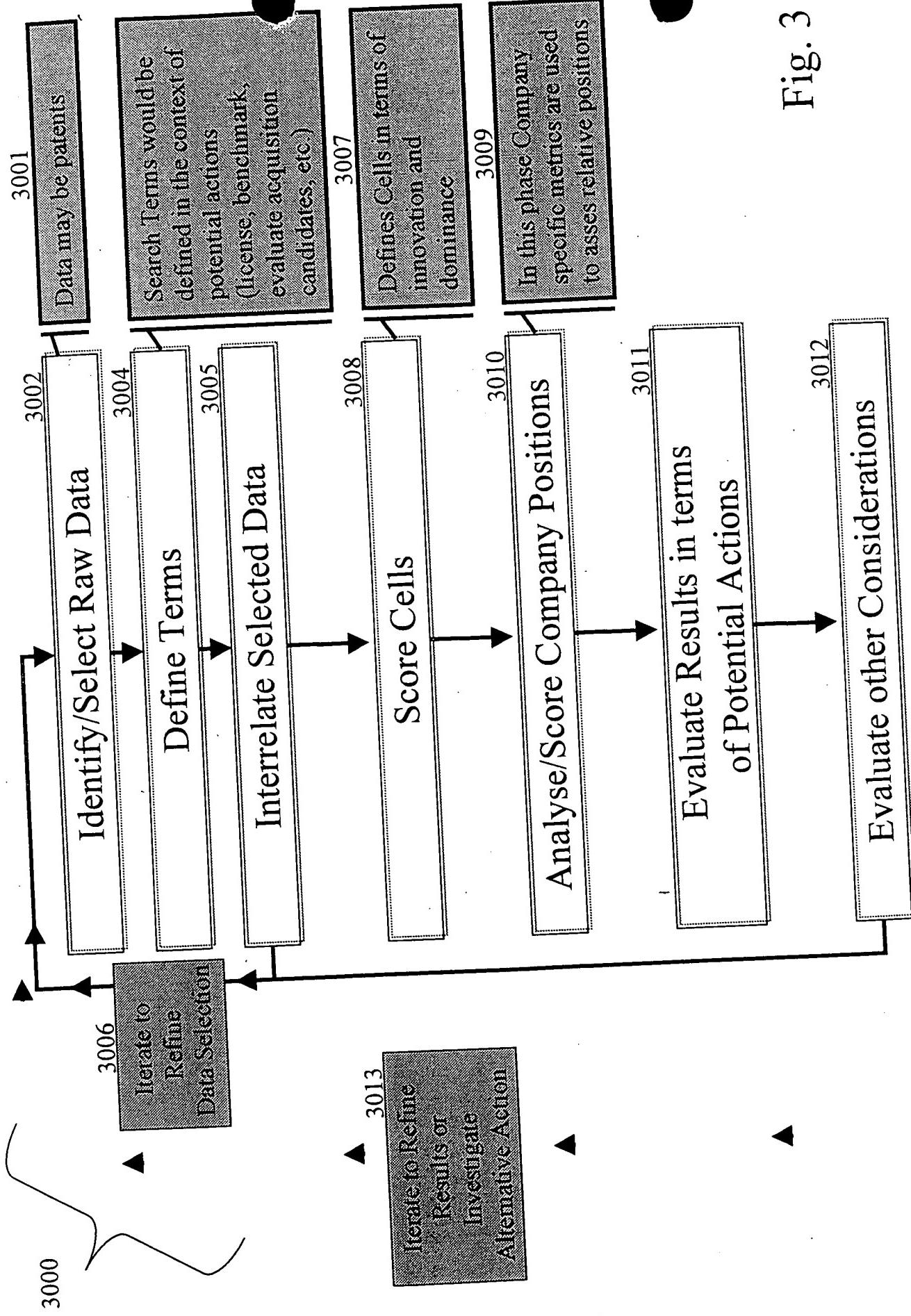


Fig. 3

An Example of Source Data

Infrared Technology

Fig. 4

Initial Definitions

SEARCH TERM - a string of text to be found within the Text or Claims of desired patents.
Search Terms can be classified as either "Action" or "Object".
Several related Action Search Terms may be combined to reflect a single Action.

CELL - a cross section of Search Terms (Action x Object).
Cells are given a reference code (e.g. A01) to depict the combination of source Search Terms.
The reference code may be followed by a C or T to note that the search terms were found
within the Text or Claims of the included patents.

CLUSTER - a group of naturally related cells.
FIELD - a patient landscape defined by the composite of all cells.

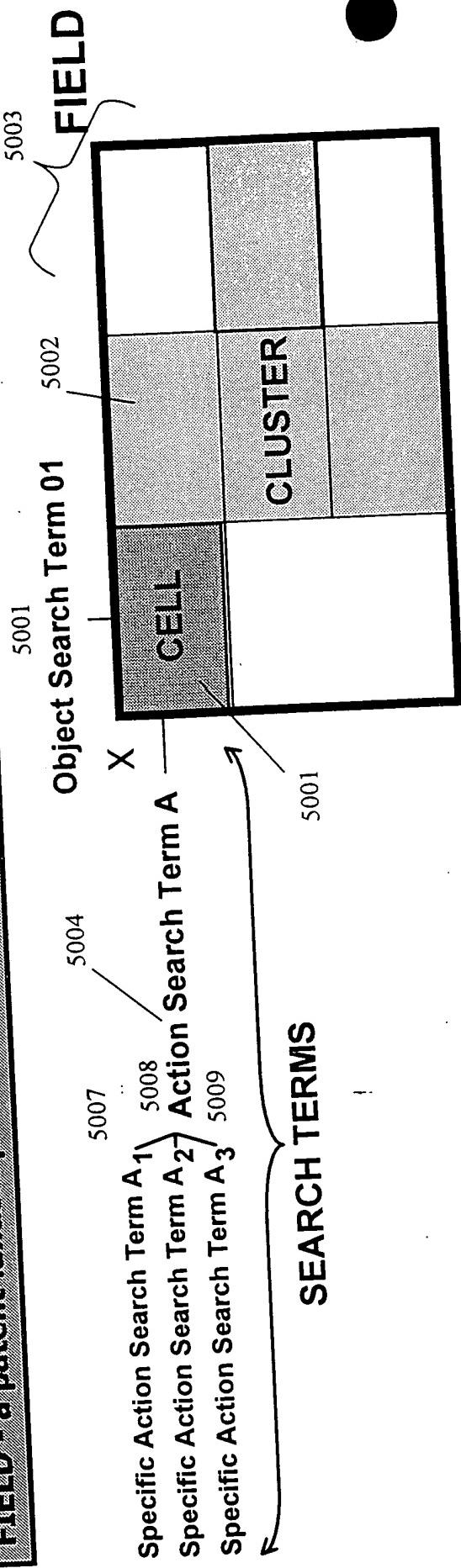


Fig. 5

The Power to be Both Focused and Inclusive

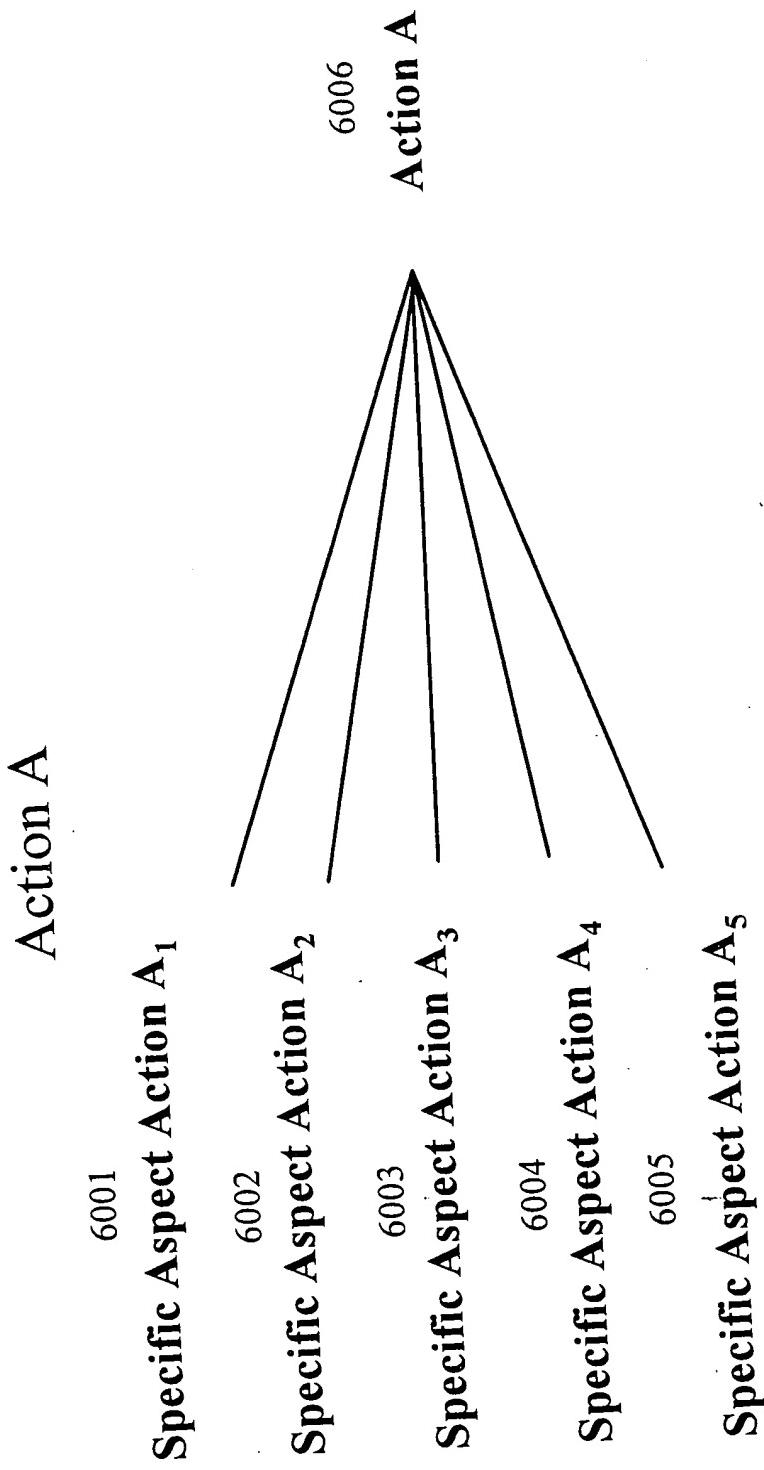


Fig. 6

* Patents identified in any of these specific terms are rolled into one Action Data set.

Patent Crossstab Report

Assignee	Document ID	Title	Issued	Document Type	Hits	Weighted Hits	Weighted Action	C01 C02 C03 C04 C05 C06					
								7001	7002	7003	7004	7005	7006
Object Weights													
He Holdings	6025595	Sprite thermal imaging system with electronic zoom	2/15/00 US		3	4	2	1	1	1	1	1	1
	WO 98/35496	SPRITE THERMAL IMAGING SYSTEM WITH ELECTRONIC ZOOM	8/13/98 PCT		3	4	3	1	1	1	1	1	1
Raytheon	WO 98/35497	SPRITE THERMAL IMAGING SYSTEM	8/13/98 PCT		3	4	4	1	1	1	1	1	1
Raytheon	5739531	Sprite thermal imaging system	4/14/98 US		3	4	3	1	1	1	1	1	1
He Holdings	4470816	Thermal sight trainer	9/11/84 US		3	5	3	1	1	1	1	1	1
United States Of America		Method and apparatus for thermal radiation imaging	2/8/00 US		2	4	3	1	1	1	1	1	1
Liu, Zhong Qi	6023637	A SYSTEM FOR THE MONITORING AND DETECTION OF HEAT SOURCES IN OPEN AREAS	10/20/99 EP-B		2	4	2	1	1	1	1	1	1
Empresa Nacional Bazan de Construcciones Naval Militares	EP 0 611 242 B1	Method of detection of dangerous lesions by their effect on the spatial distribution of modulation of temperature and homogeneity of tissue.	10/5/99 US		2	1	2	1	1	1	1	1	1
Omnicorder Technologies	5961466	Real time adaptive digital image processing for dynamic range remapping of imagery including low-light-level visible imagery	6/1/99 US		2	1	1	1	1	1	1	1	1
Massachusetts Institute Of Technology	5909244	Method and apparatus for analyzing an image to detect and identify defects	9/29/98 US		2	4	1	1	1	1	1	1	1
Vachisevano, George J.	5815198	Simplified simulation of effects of turbulence on digital imagery	5/26/98 US		2	1	4	1	1	1	1	1	1
United States Of America	5756990	Thermal imaging device with selectively replaceable telescopic lenses and automatic lens identification	4/7/98 US		2	4	2	1	1	1	1	1	1
Hughes Electronics	5737119	Digital imaging device optimized for color performance	9/30/97 US		2	4	2	1	1	1	1	1	1
Hughes Electronics	5673143	THERMAL IMAGING DEVICE	9/16/97 US		2	3	2	1	1	1	1	1	1
Eastman Kodak	5668596		3/12/97 EPA		2	4	1	1	1	1	1	1	1
He Holdings Dba Hughes Electronics	EP 0 762 173 A2												

Fig. 7

Assignee Rollup

8021

8001

→ 8022 8023 8024 8025 8026

Rank	Assignee	Hits	Recent Patents	Weighted Recent Hits	Weighted Action	C01	R C01	C02	R C02	C03	R C03	C04	R C04	C05	R C05	C06	R C06
8002	Patents			62		87		20		34		263		249			
8003	Issued Patents			49		65		17		23		206		222			
8004	Applied Patents			13		22		3		11		57		27			
8005	Recent Patents			16		33		10		11		55		40			
8006	Issued Recent Patents			14		22		7		7		44		34			
8007	Applied Recent Patents Dominance			2		11		3		4		11		6			
8008	Recent Dominance			0.48		0.28		0.20		0.44		0.48		0.40			
8009	Recent Innovation Factor 4			0.44		0.18		0.20		0.18		0.27		0.28			
8010	Issued Innovation Factor 4			0.33		0.62		0.69		1.29		0.10		0.17			
8011	Applied Innovation Factor 4			0.64		0.87		0.33		0.50		-0.02		0.19			
8012	Predictive Innovation Factor 4			0.31		0.26		-0.36		-0.79		-0.12		0.02			
1	Eastman Kodak	43	42	4		3		3		1		30		3		6	1
2	United States Of America	34	31	3	2			2	1			11		2		21	
3	Texas Instruments	20	20	3	3			2				3		3		2	
4	Xerox	18	18	4	4			17	3		1	1					
5	Minnesota Mining & Manufacturing	17	17	2	2			2	1			14		1			
6	Intl Business Machines	16	16	2	2			1				12		2		3	
7	Hughes Electronics	16	13	3	2			1				10		2		5	1
8	Raytheon	15	11	12	8			5	2	2	2	6		6		2	2
9	Hughes Aircraft	14	13	1	1							3		11		1	
10	Westinghouse Electric	12	12									2		10			
11	Thermoscan	12	12											12		5	
12	Konica	12	12											1			
13	Polaroid	12	12												2		
14	Barr & Stroud	10	10									1		9		9	
15	Matsushita Industrial Electric	10	10									1		9		3	

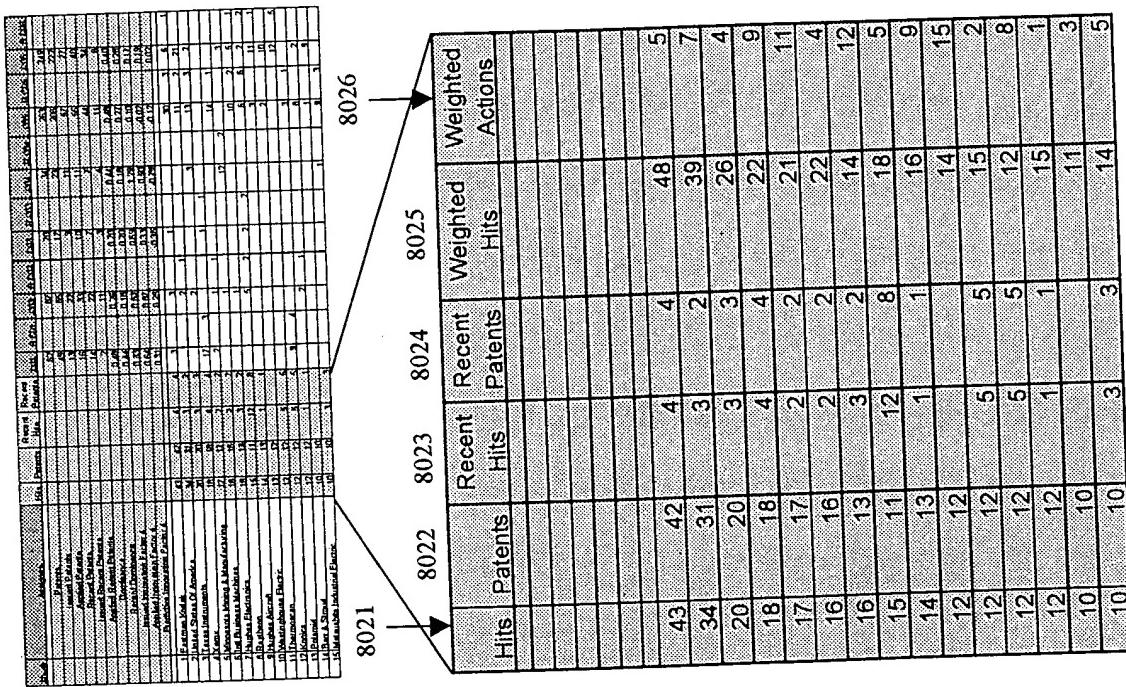
8020

Fig. 8A

Fig. 8B

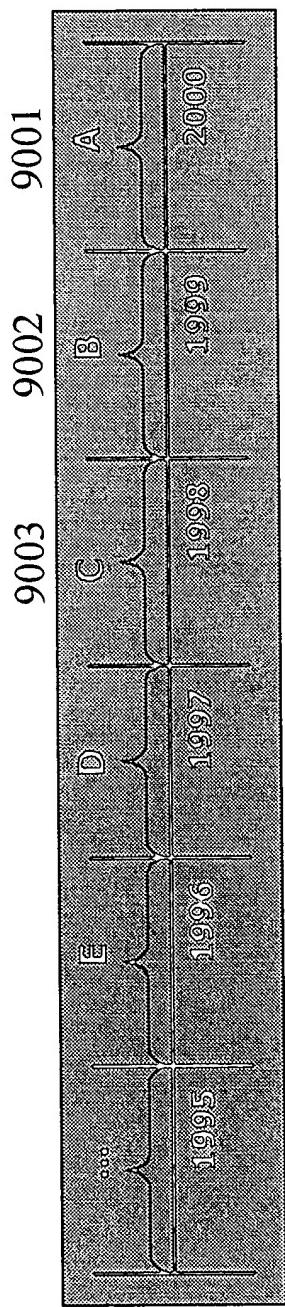
Assignee Indices

Assignee Rollup



Cell Indices - Definitions

Innovation Factor 1 (Applied or Issued)



$$\text{Innovation Factor} = \frac{A + B}{2}$$

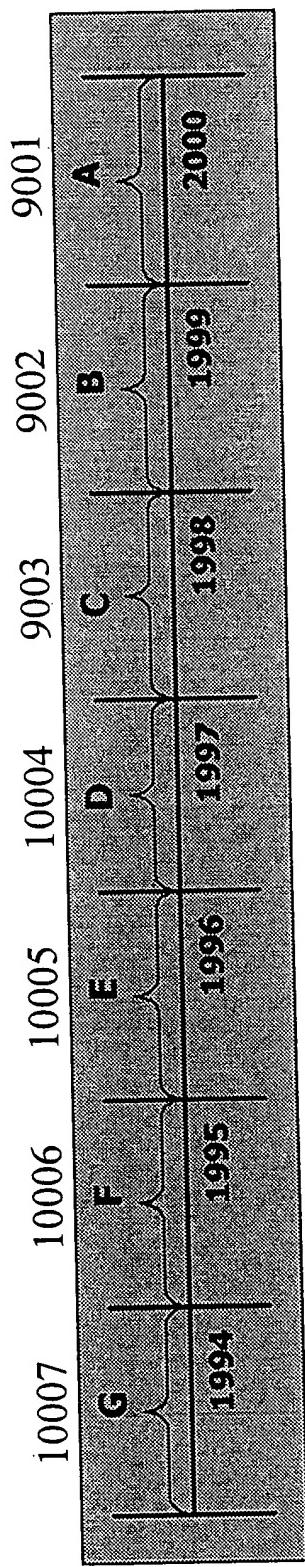
Where:

- A: Maximum value in each year (9003, 9002, 9001, 9000, 9001, 9003)
- B: Minimum value in each year (9000, 9001, 9002, 9003, 9002, 9003)

Fig. 9

Cell Indices - Definitions

Innovation Factor 4 (Applied or Issued)



Innovation Factor 4 =

$$\frac{\left(\frac{(A-B)}{B} \times 6 \right) + \left(\frac{(B-C)}{C} \times 5 \right) + \left(\frac{(C-D)}{D} \times 4 \right) + \left(\frac{(D-E)}{E} \times 3 \right) + \left(\frac{(E-F)}{F} \times 2 \right) + \left(\frac{(F-G)}{G} \times 1 \right)}{10017}$$

21

10017

Fig. 10

Cell Selection Matrix

Cell Selection Index is calculated for each cell based on the implied suitability for joint ventures or internal development:

		optical align					
		01	02	03	04	05	06
		thermal image					
		01	02	03	04	05	06
A B C	License	4	4	1.25	1.25	6	0
	License					0	14
	License	20	15	5	10.5	1.75	3.5
A B C	Develop	6	16	1.25	1.25	14	0
	Develop					0	6
	Develop	5	15	7.5	7	0.75	1.5

Fig. 11

Cell Selection Index

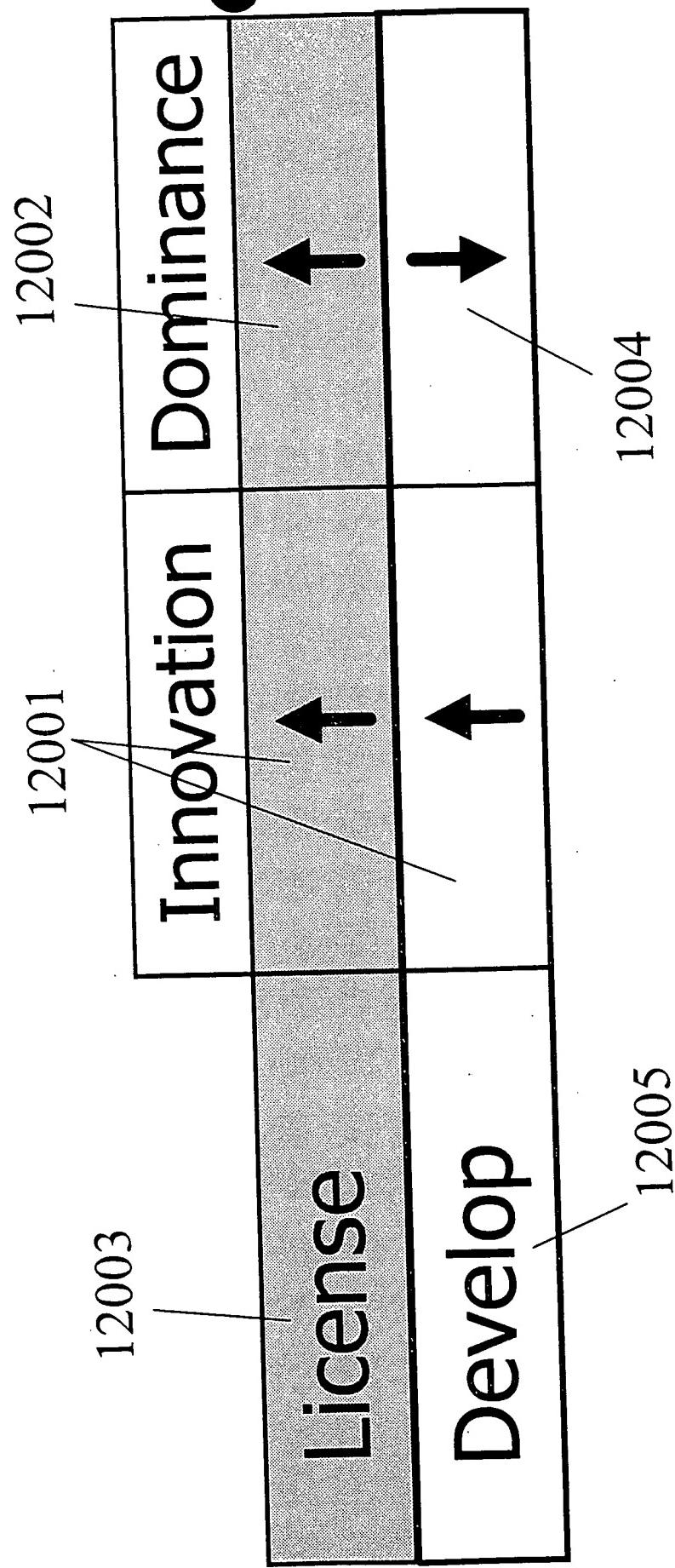


Fig. 12

Cell Selection Matrix

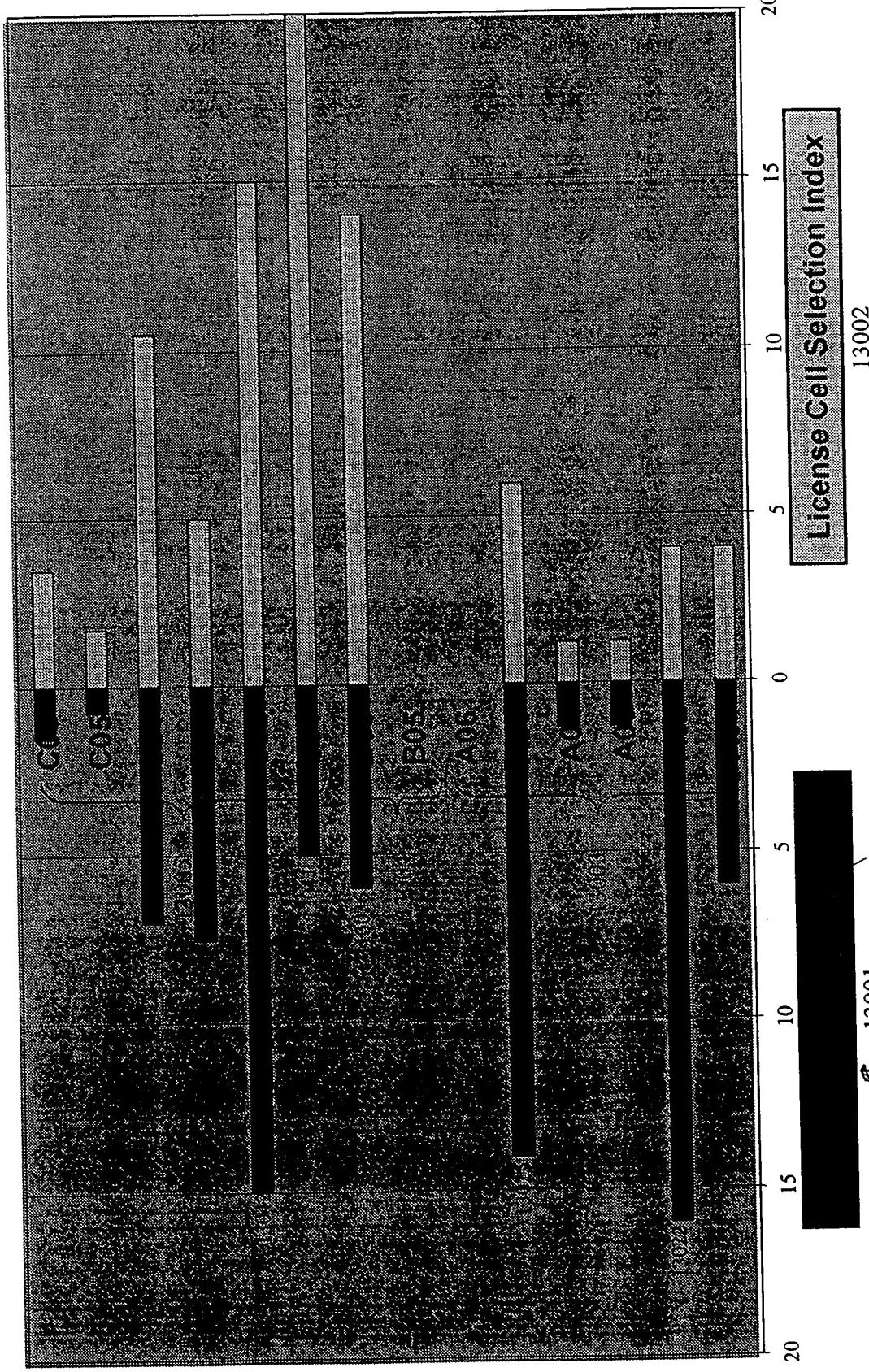
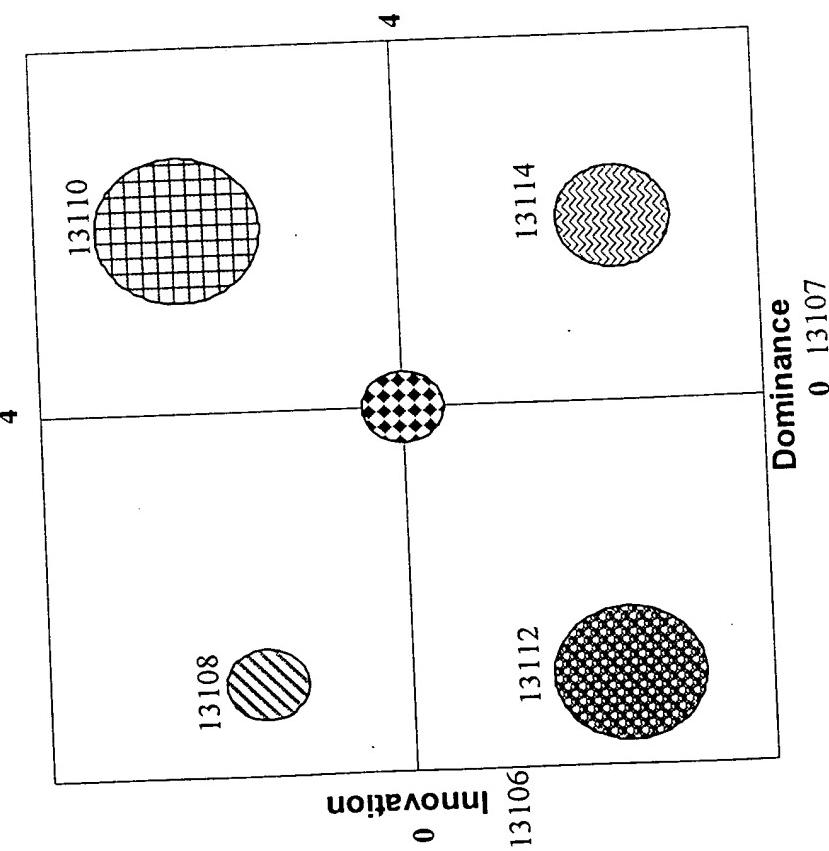


Fig. 13 A

Cell Selection Score - Bubble Chart

Dominance



High
Low

High
Low

Innovation

Dominance
0 13107 4

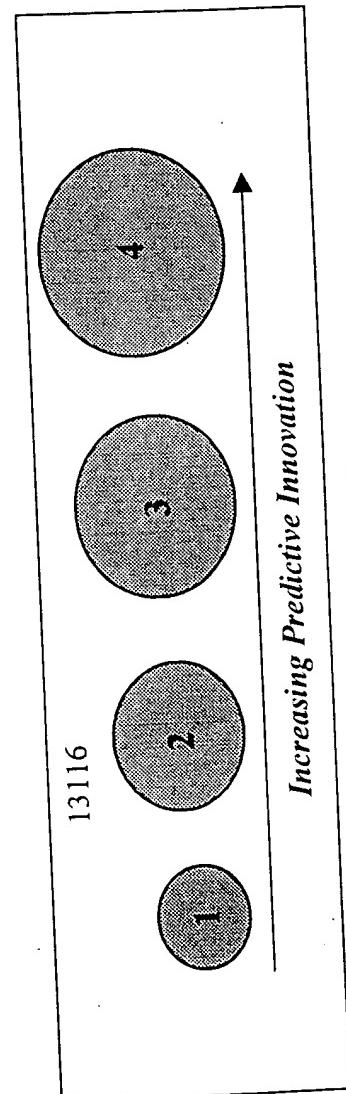
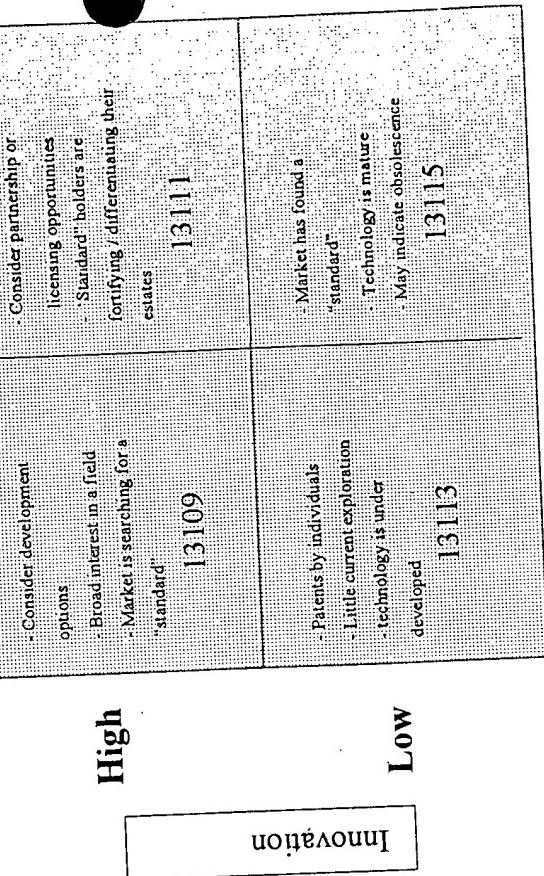


Fig. 13B

Assignee Composite Score

Rank	Assignee	C01	C02	C03	C04	C05	C06
1	A	61.4	46.1	5.1	0.0	59.0	25.0
2	B	0.0	55.4	0.0	0.0	26.4	80.6
3	C	0.0	30.0	0.0	31.5	28.0	7.0
4	D	400.0	0.0	10.0	0.0	0.0	0.0
5	E	40.0	30.0	0.0	0.0	26.3	0.0
6	F	0.0	15.0	0.0	147.0	0.0	10.5
7	G	0.0	18.5	0.0	0.0	26.8	26.8
8	H	0.0	147.3	28.6	0.0	30.1	20.0
9	I	0.0	0.0	0.0	0.0	5.7	45.0
10	J	0.0	0.0	0.0	0.0	3.5	35.0
11	K	0.0	0.0	0.0	0.0	0.0	59.5
12	L	260.0	0.0	0.0	0.0	7.0	0.0
13	M	0.0	45.0	0.0	0.0	14.0	7.0
14	N	0.0	0.0	0.0	0.0	1.8	31.5
15	O	0.0	0.0	0.0	10.5	21.0	0.0

14010

Fig. 14

Assignee Composite Score Normalized

Rank	Assignee	C01	C02	C03	C04	C05	C06
1	A	15.4	25.6	8.5	0.0	100.0	31.0
2	B	0.0	30.8	0.0	0.0	44.7	100.0
3	C	0.0	16.7	0.0	21.4	47.5	8.7
4	D	100.0	0.0	16.7	0.0	0.0	0.0
5	E	10.0	16.7	0.0	0.0	44.5	0.0
6	F	0.0	8.3	0.0	100.0	0.0	13.0
7	G	0.0	10.3	0.0	0.0	45.4	33.2
8	H	0.0	81.8	47.7	0.0	51.0	24.9
9	I	0.0	0.0	0.0	0.0	9.6	55.8
10	J	0.0	0.0	0.0	0.0	0.0	73.8
11	K	0.0	0.0	0.0	0.0	11.9	0.0
12	L	65.0	0.0	25.0	0.0	0.0	23.7
13	M	0.0	0.0	0.0	0.0	3.0	39.1
14	N	0.0	0.0	0.0	0.0	7.1	35.6
15	O	0.0	0.0	0.0	0.0	0.0	0.0

14002 →

14001 →

14003 →

14004 →

14005 →

14006 →

14007 →

14008 →

Optic align

thermal image

remote network or wireless network

digital scan

digital image

photo-receptor or photoreceptor

15010

Fig. 15A

Assignee Composite Score

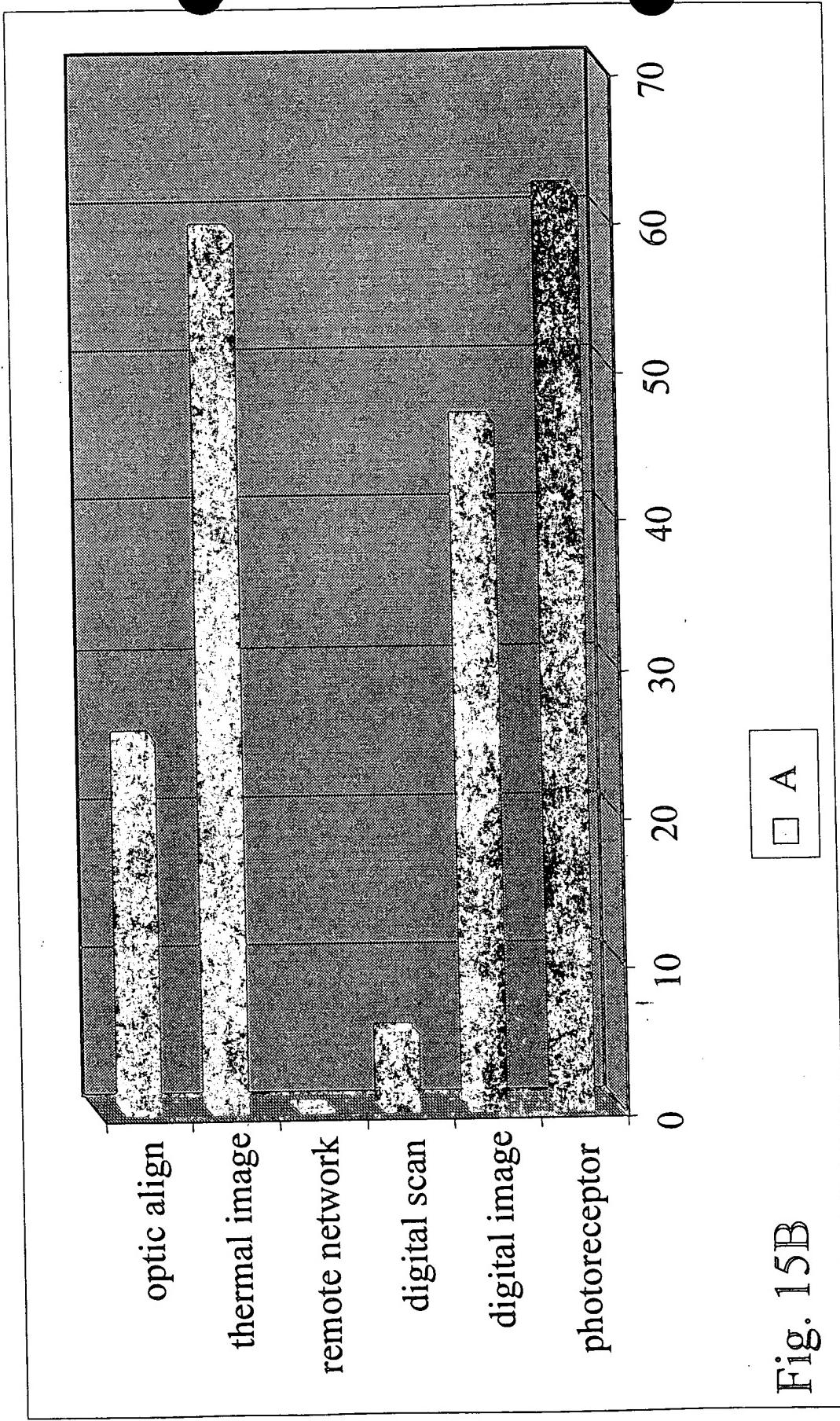


Fig. 15B

Assignee Composite Score

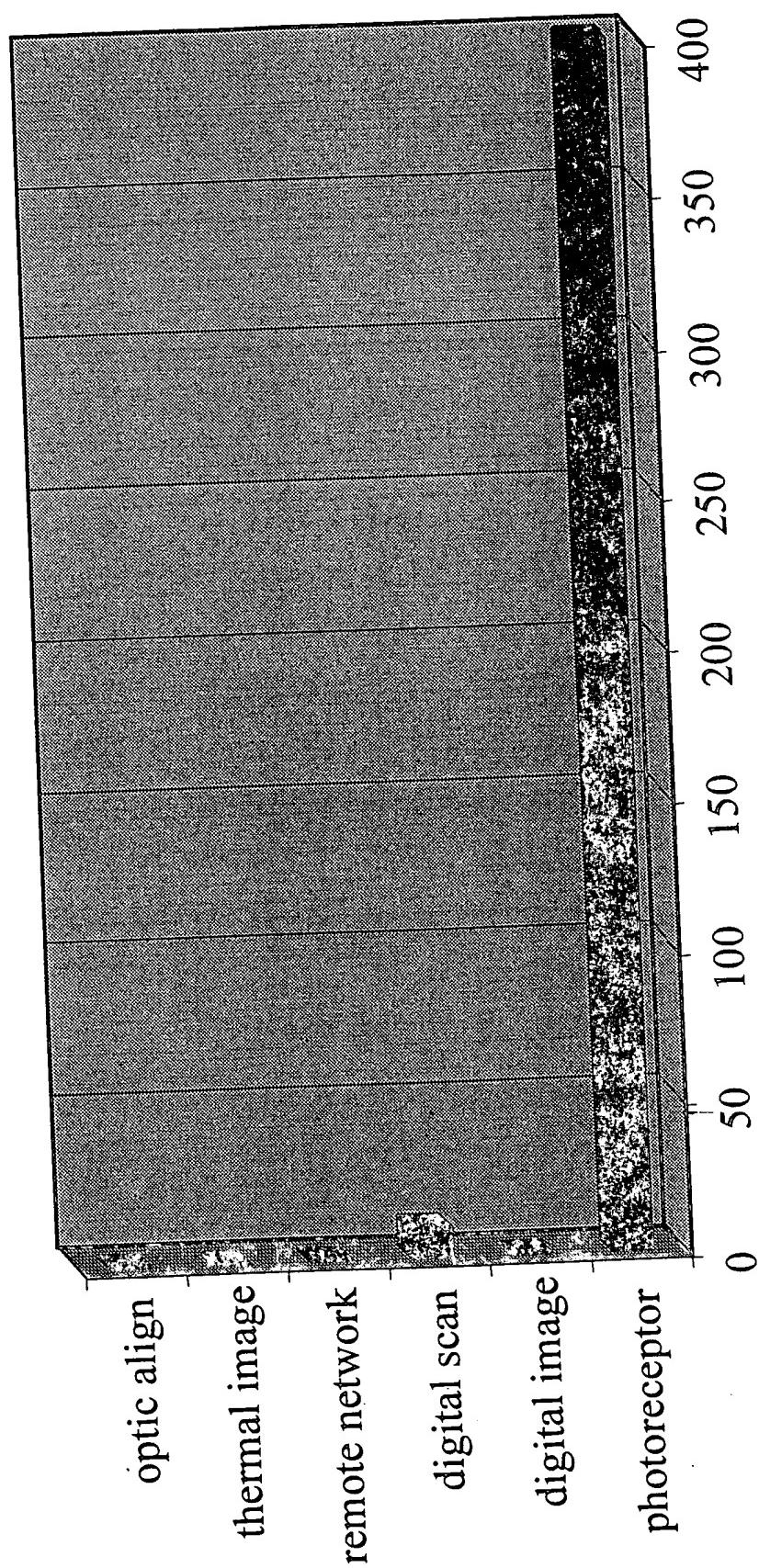


Fig. 15C

D

Assignee Composite Score

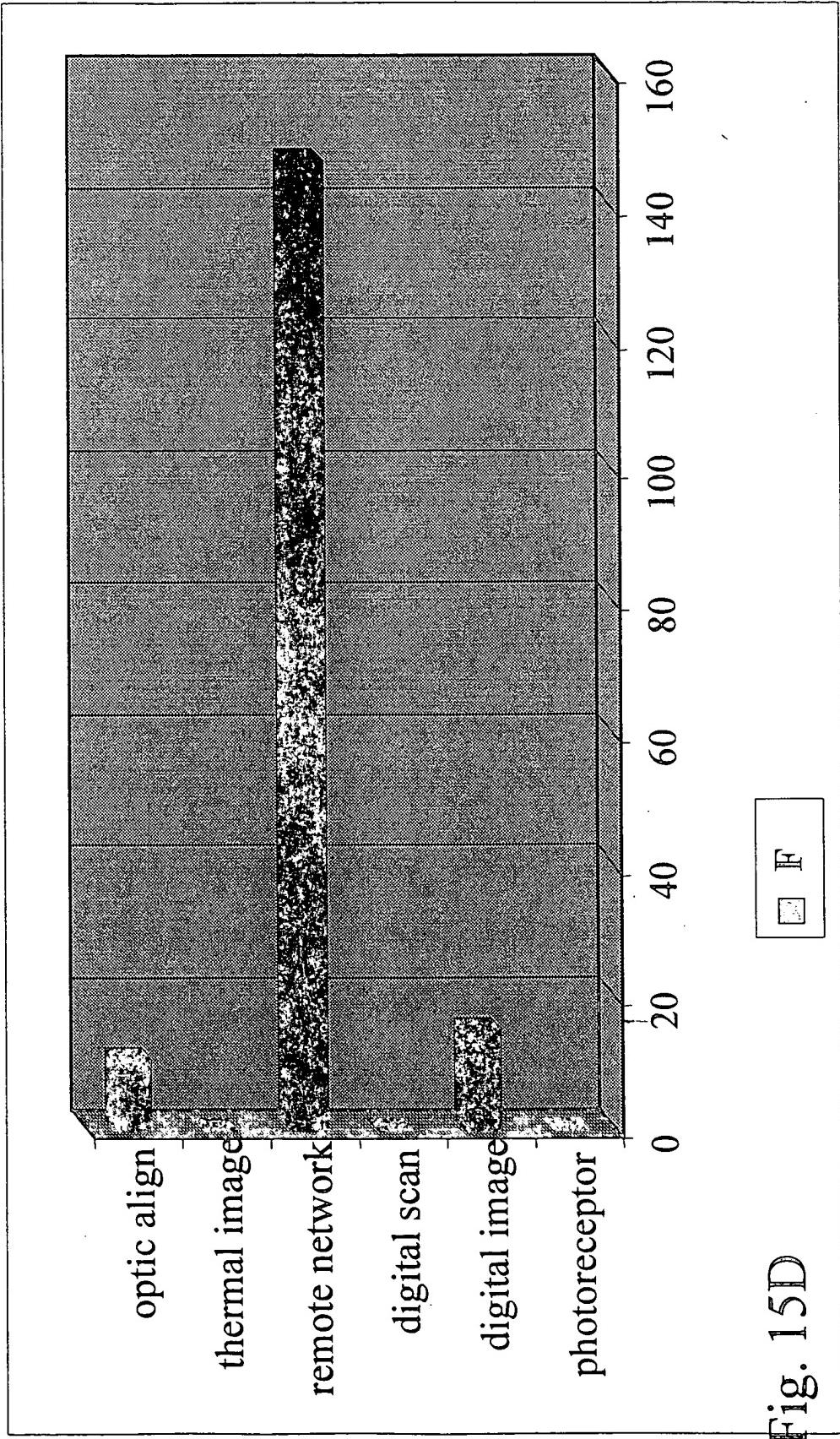


Fig. 15D

Assignee Composite Score

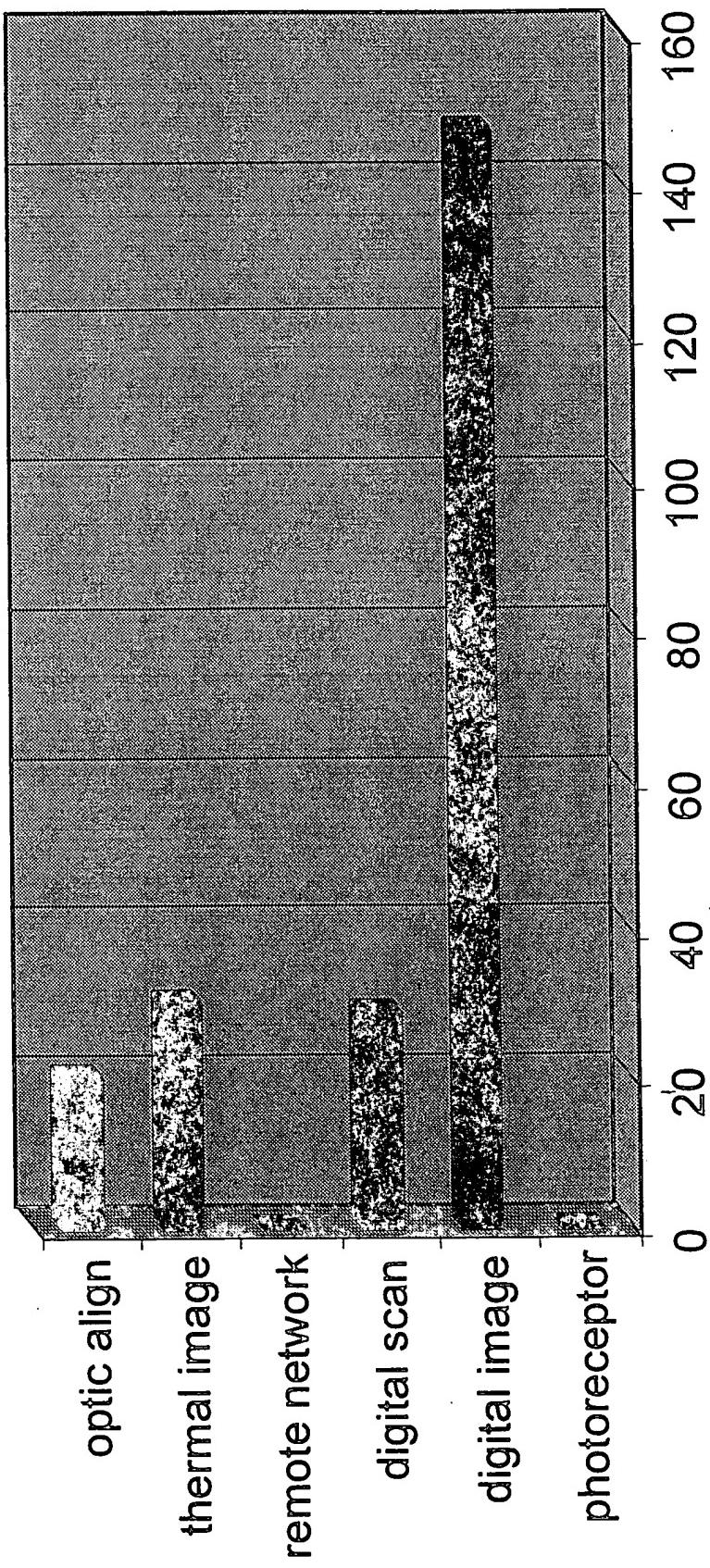


Fig. 15E

H

Graphical Representation of Assignee Composite Score

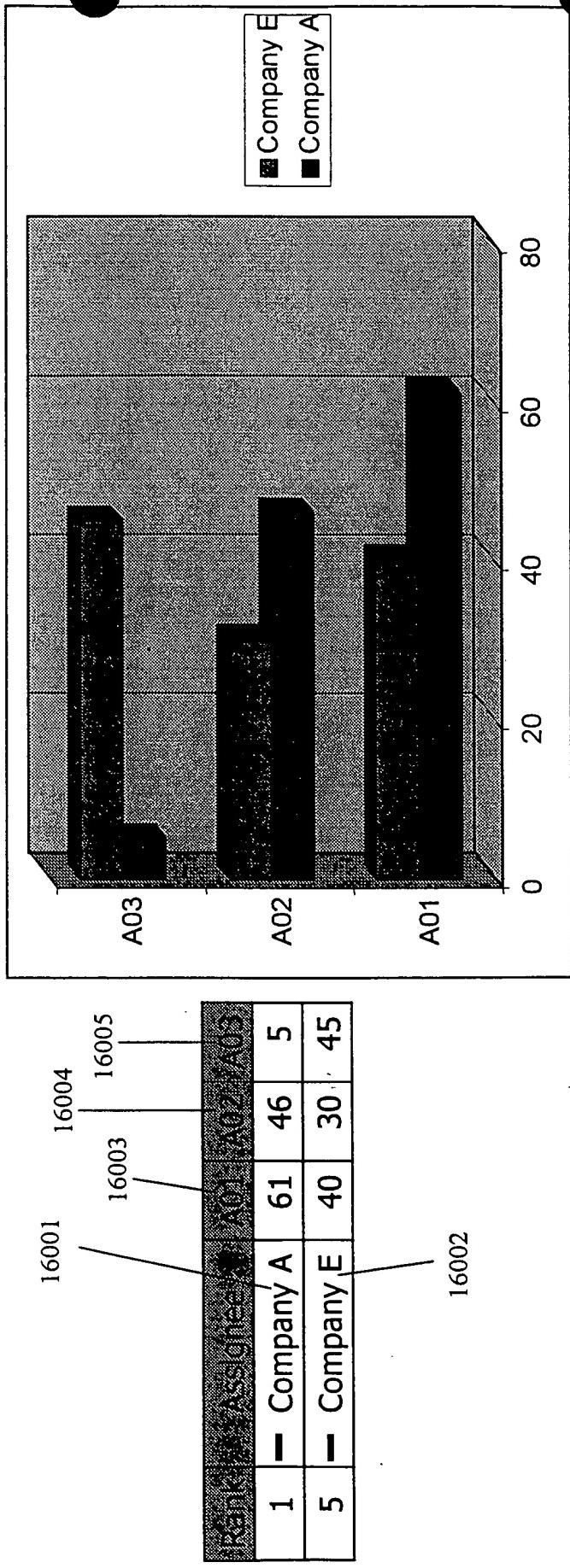


Fig. 16

Assignee Composite Score

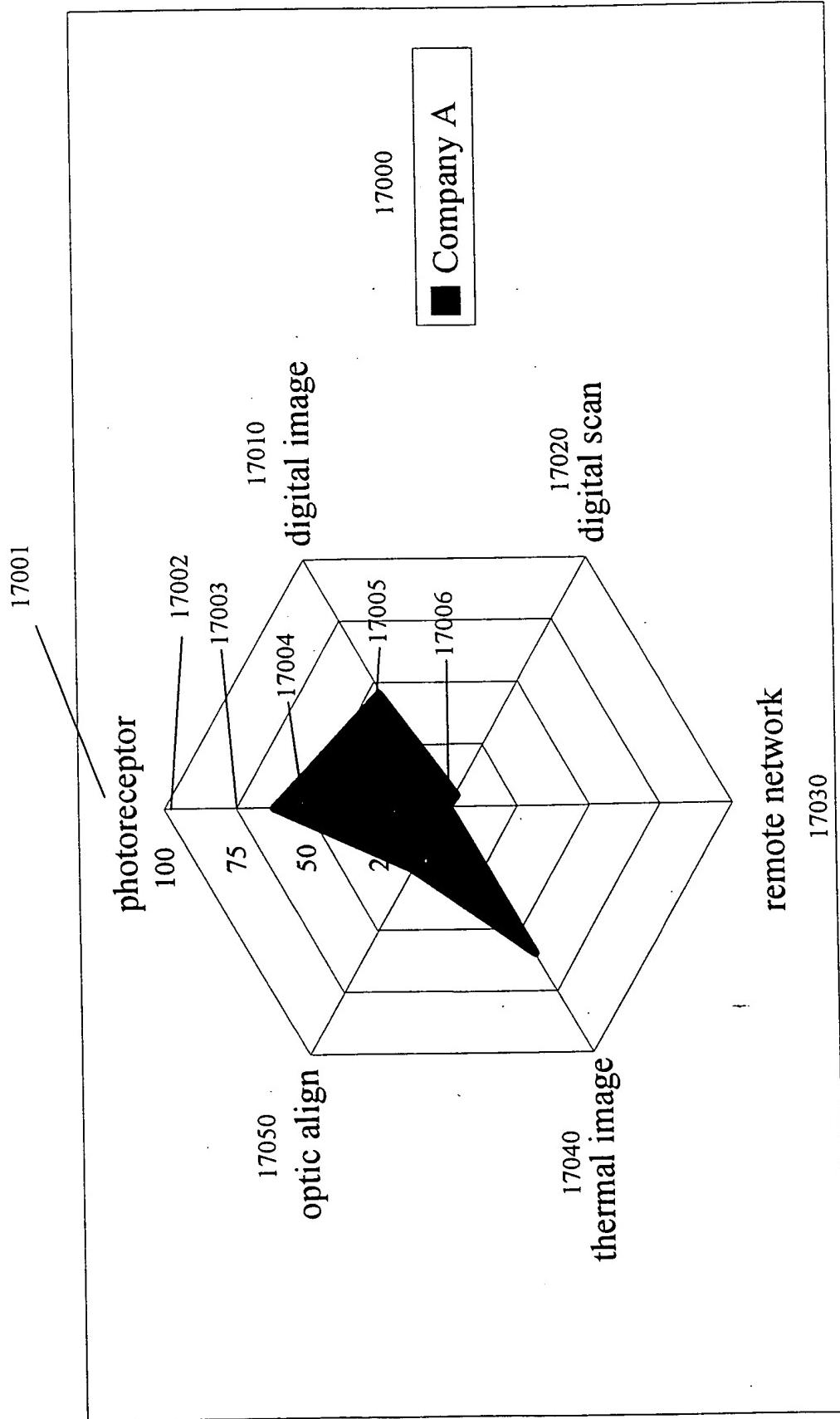
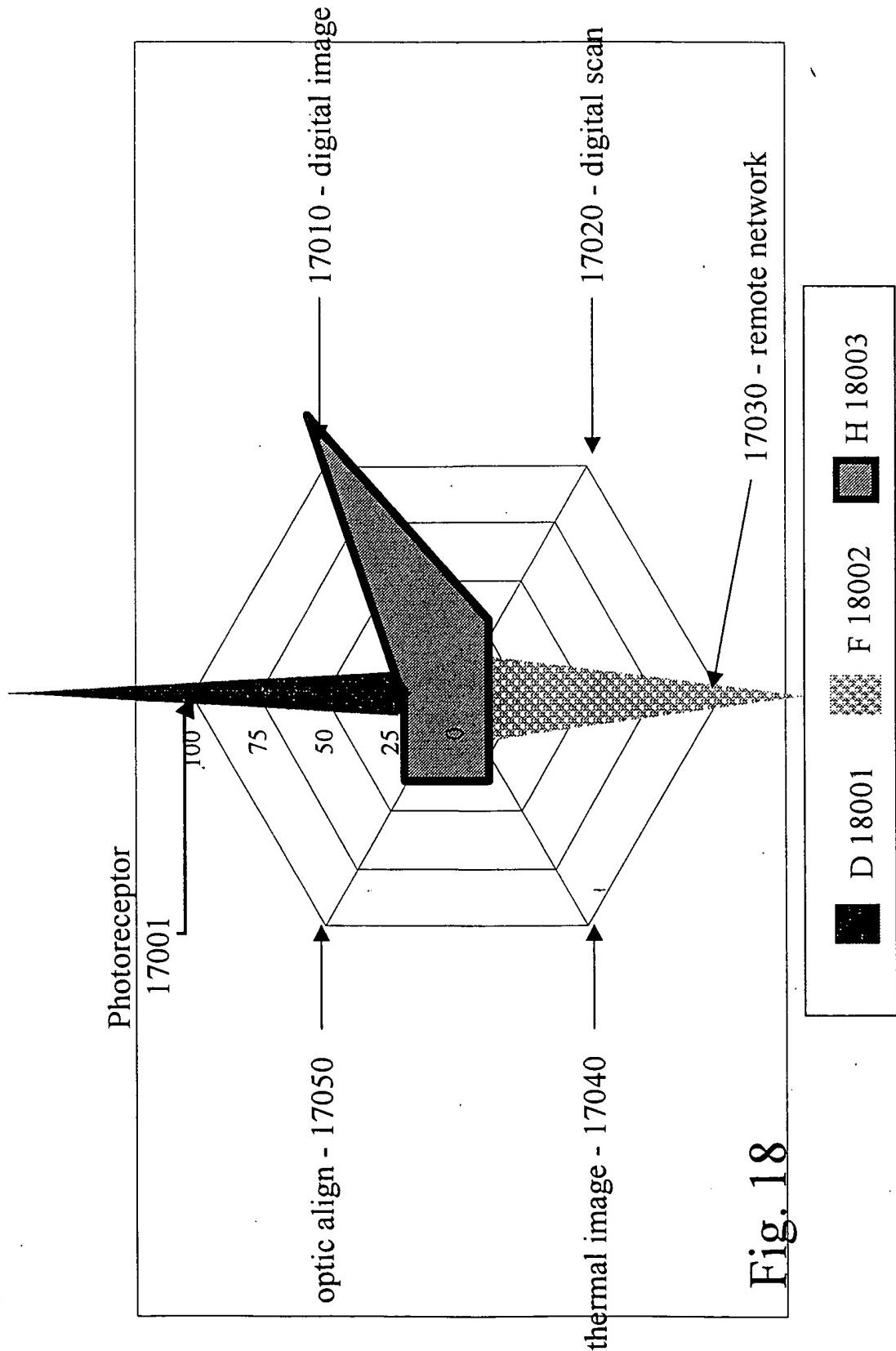


Fig. 17

Assignee Composite Score



Assignee Composite Score

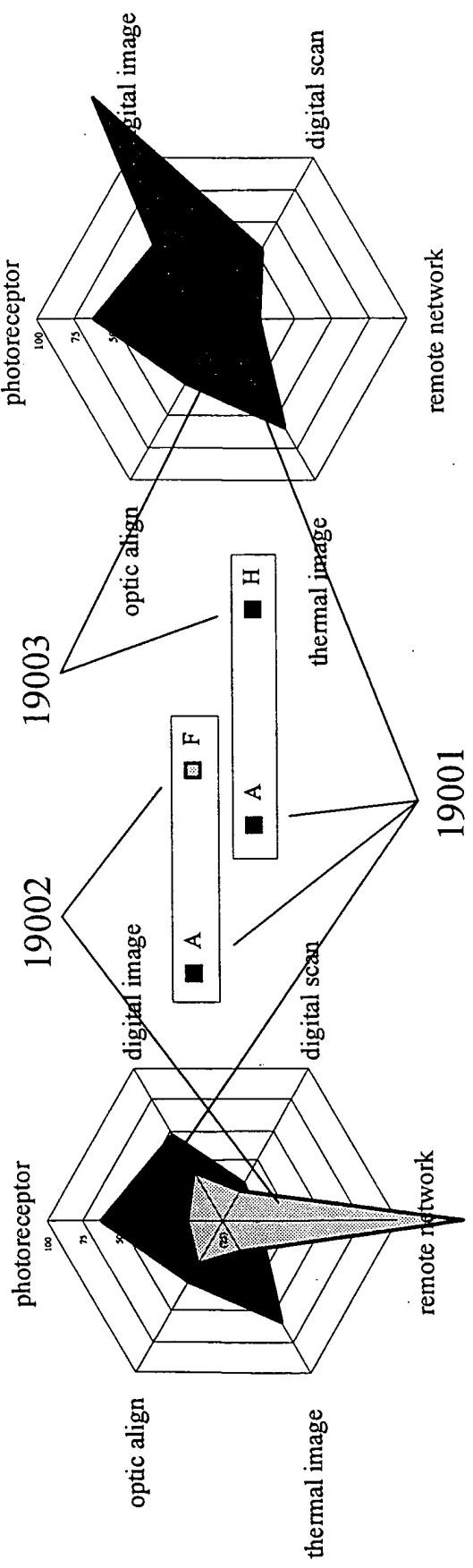


Fig. 19

Target Partner 1

Assignee Specific Cell Selection Indices

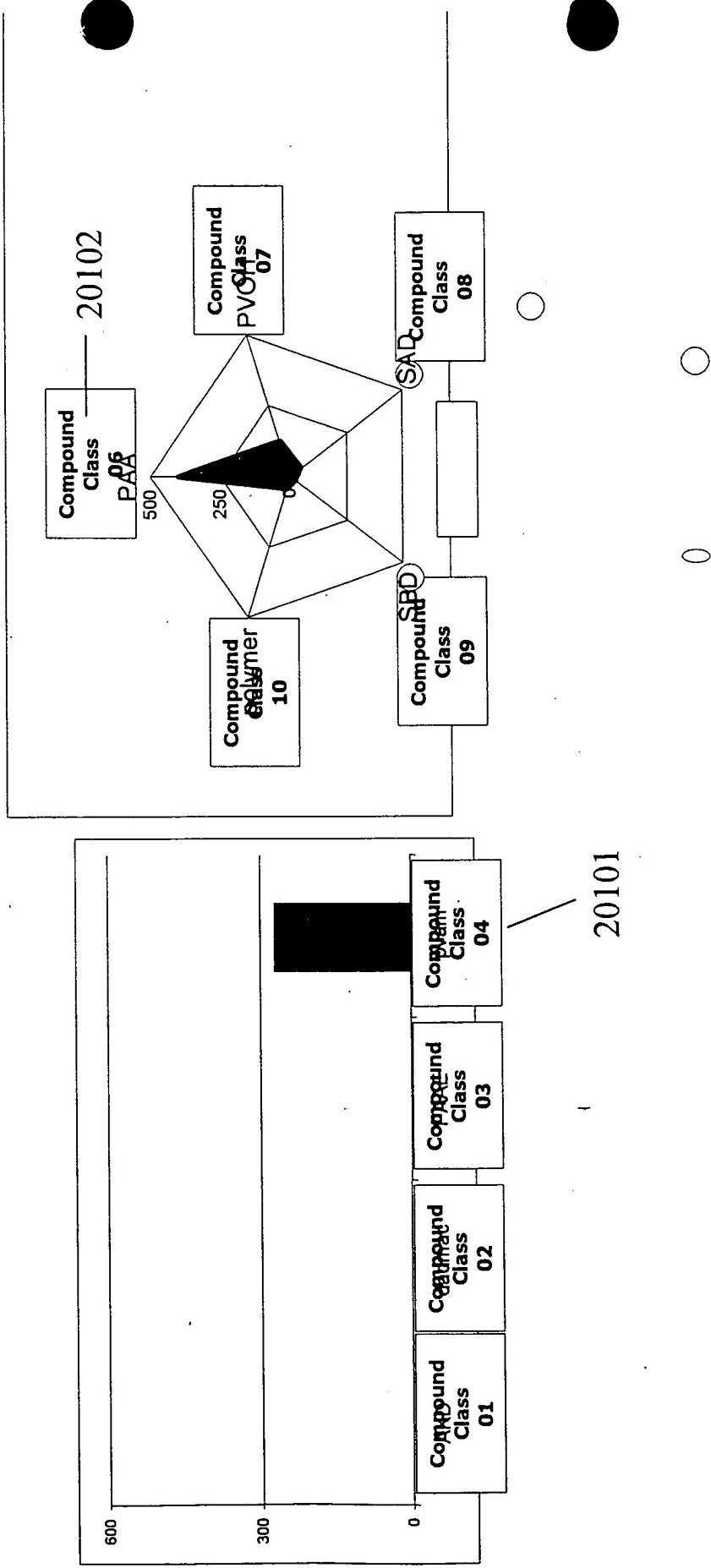


Fig. 20A

Alternative Partner 2

Assignee Specific Cell Selection Indices

20200

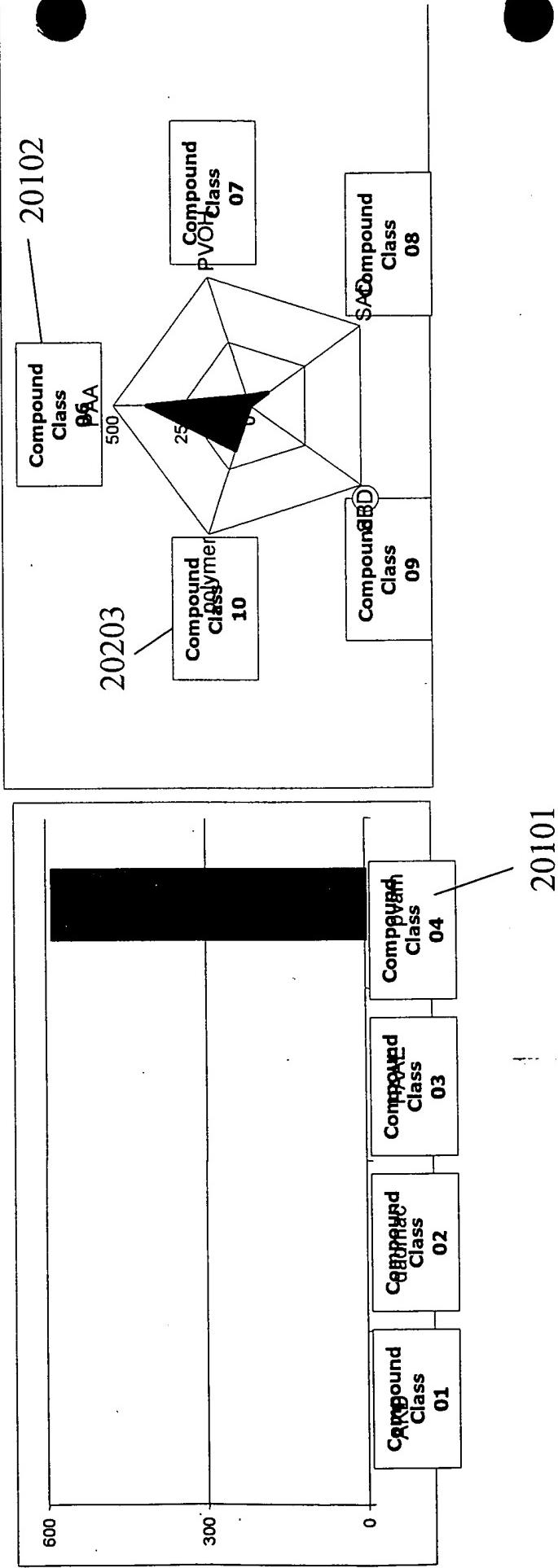


Fig. 20B

Alternative Partner 3

Assignee Specific Cell Selection Indices

20300

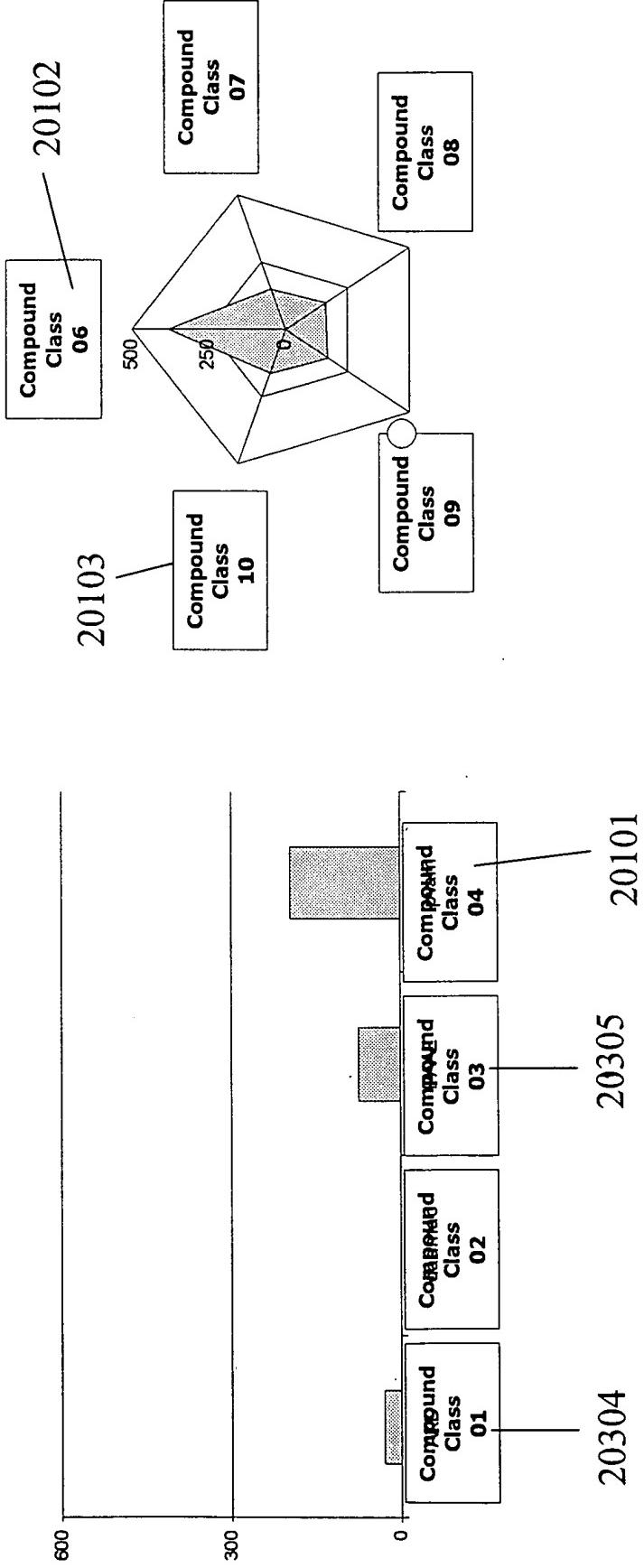


Fig. 20C

Assignee Field Index vs. Patent Count

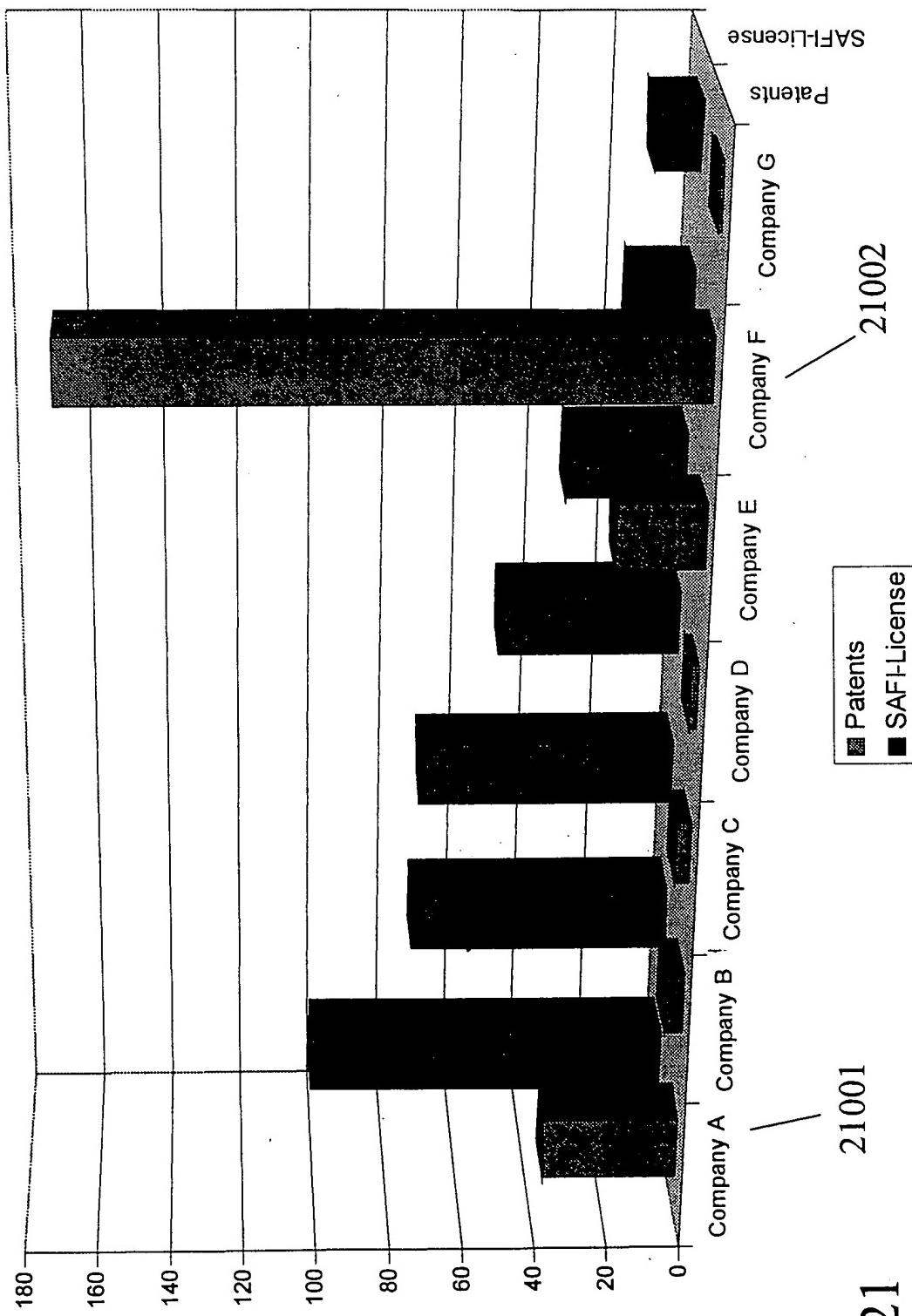


Fig. 21

21001

21002

Standardized Assignee Cell Index - Application B

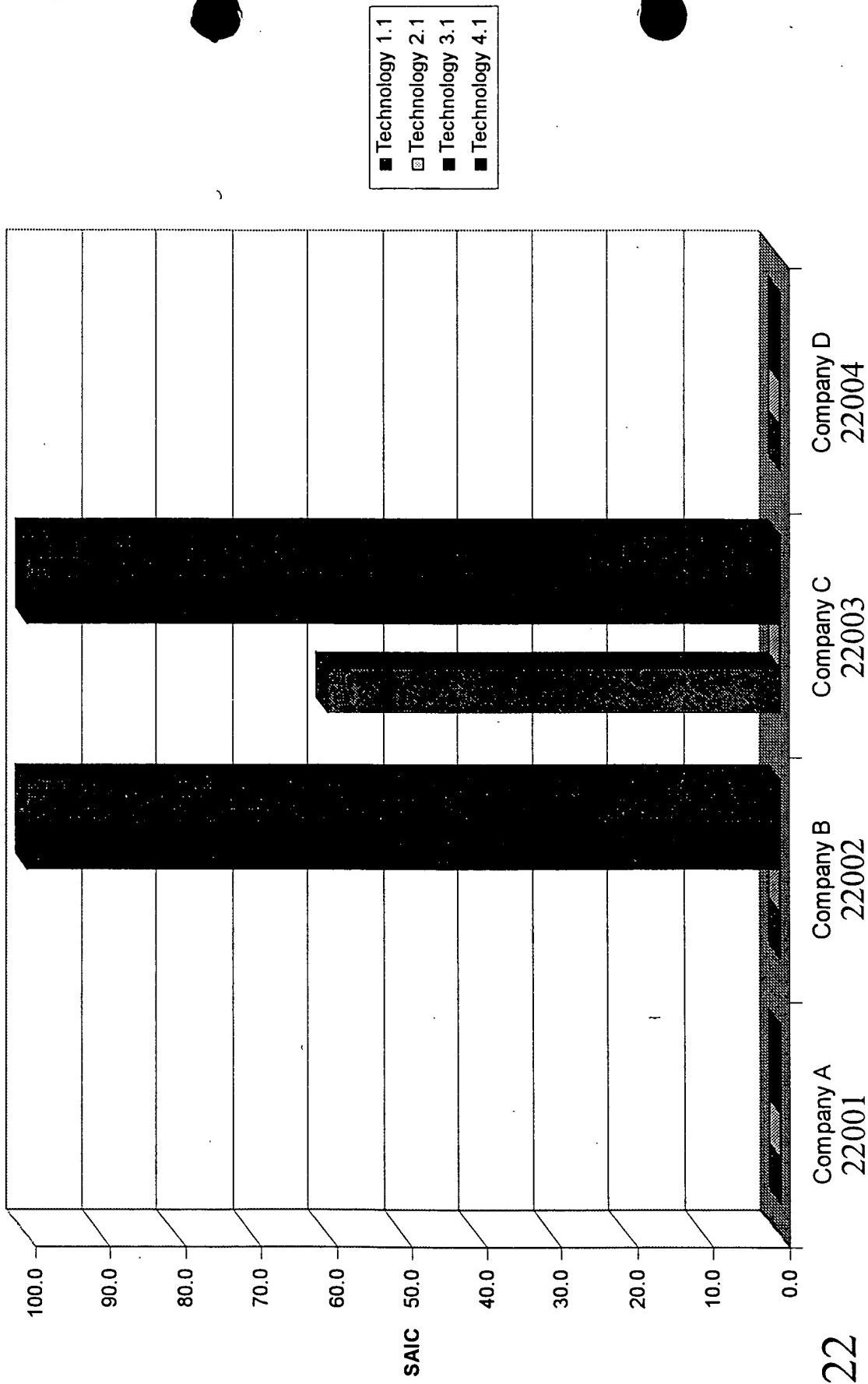


Fig. 22

Standardized Assignee Cell Index - Application C

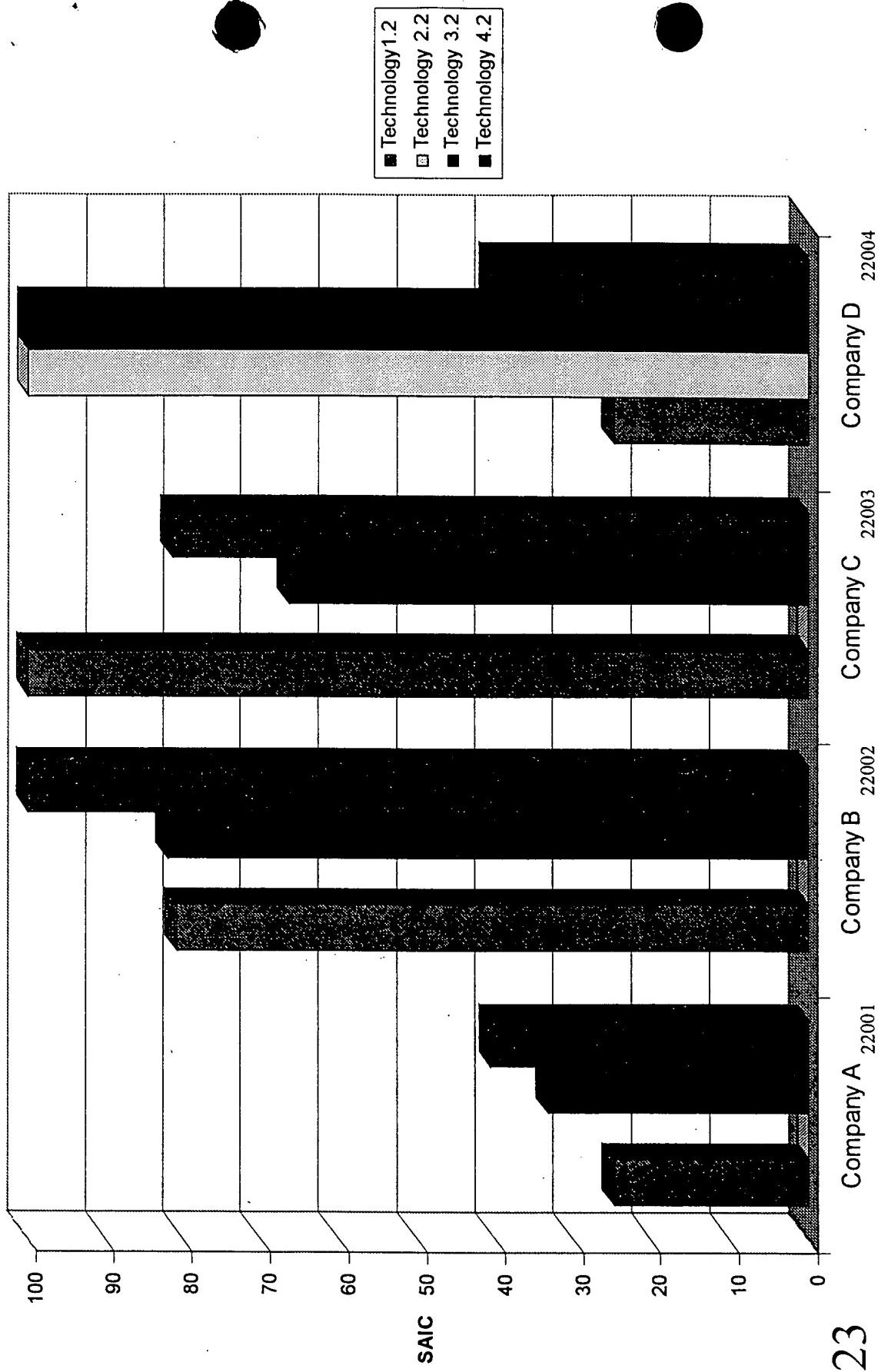


Fig. 23

Standardized Assignee Cell Index: Company A vs. Company B

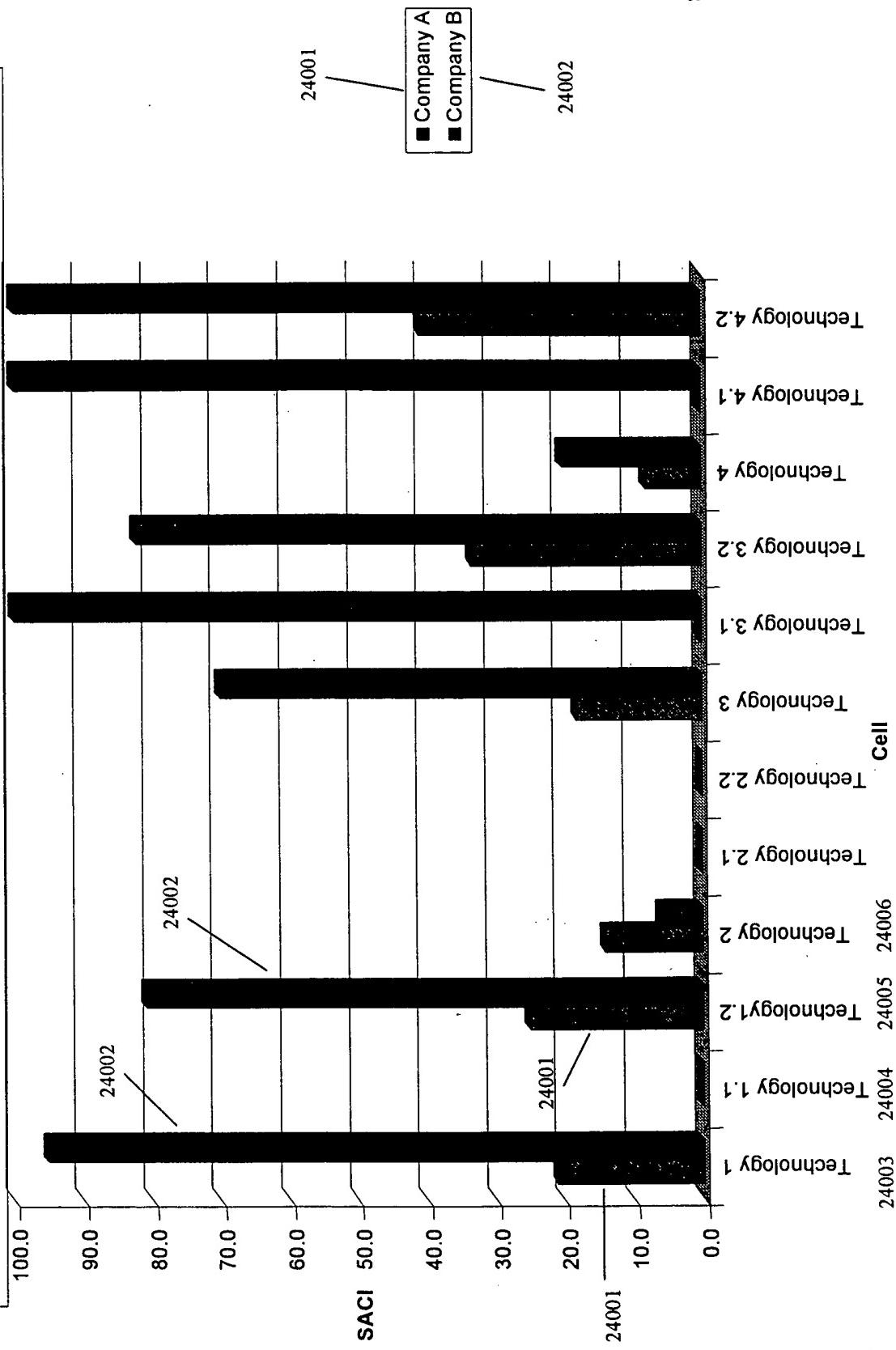


Fig. 24

Naturally Defined Clusters

Clusters	Count of Cells	Occurrences
C05,A05	2	18
C06,A06	2	18
A01,C01	2	16
A02,C02	2	14
A05,C05	2	14
A06,C06	2	14
B06,C06	2	10
C02,C05	2	10
C01,A01	2	8
C03,C05,C02	3	6
C02,C03	2	6
C05,C02	2	6
C06,B06	2	6
C04,A04,A06,C06	4	4
C06,A06,C05,A05	1	4

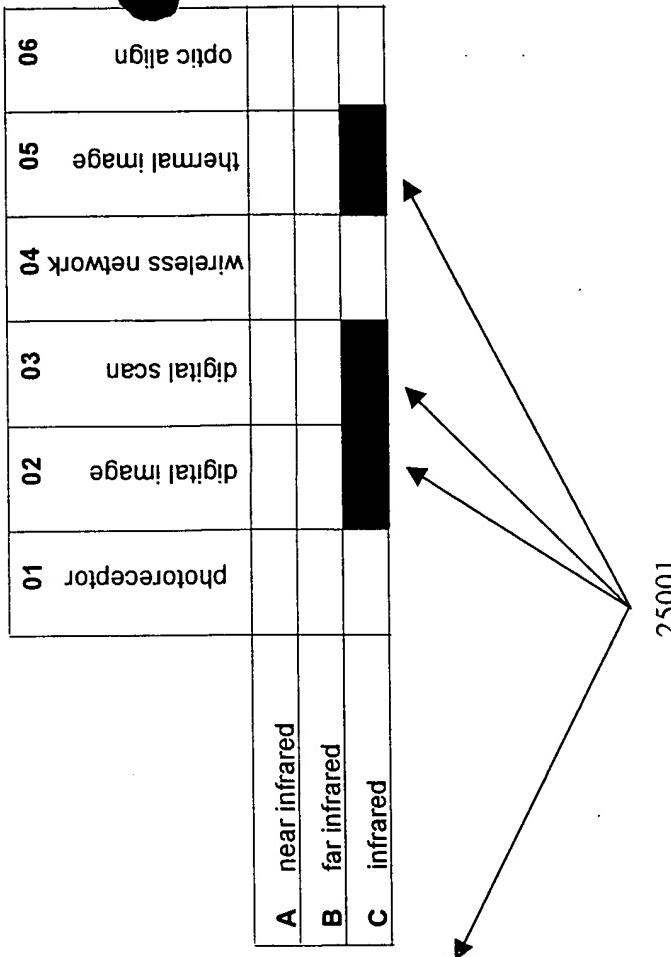


Fig. 25A

Top Assignees Across a Selected Cluster

C02, C03, C05

C02, C03, C05
Eastman Kodak
Minnesota Mining & Manufacturing
Texas Instruments
United States Of America
Hughes Electronics
Polaroid
Raytheon
Matsushita Industrial Electric
Us Philips
He Holdings Dba Hughes Electronics
Honeywell
Agfa-Gevaert
Massachusetts Institute Of Technology
Cairns & Brother
Nec
Raytheon Ti Systems

Fig. 25B

Top Inventors

Eastman Kodak

Inventor	Hits	Patents	Weighted Hits	Weighted Action
Chapman, Derek D.	10	10	1	4
DeBoer, Charles D.	8	8	9	5
Evans, Steven	6	6	6	3
Burberry, Mitchell S.	3	3	4	3
Schildkraut, Jay S.	2	2	3	4
Tutt, Lee W.	2	2	3	3
Momot, David	2	2	2	3
Bugner, Douglas E.	2	1	2	4
Byers, Gary W.	2	1	2	6
Kolb, Jr., Frederick J.	2	1	2	2
Vogel, Richard M.	2	1	2	1
Harvey, Donald M.	1	1	3	4
De Groot, Gerald H.	1	1	2	5
McIntyre, Dale F.	1	1	2	1
Simpson, William H.	1	1	2	3
Bloom, Richard M.	1	1	1	2

Fig. 26

Internet Portal Based Patent Search Tool

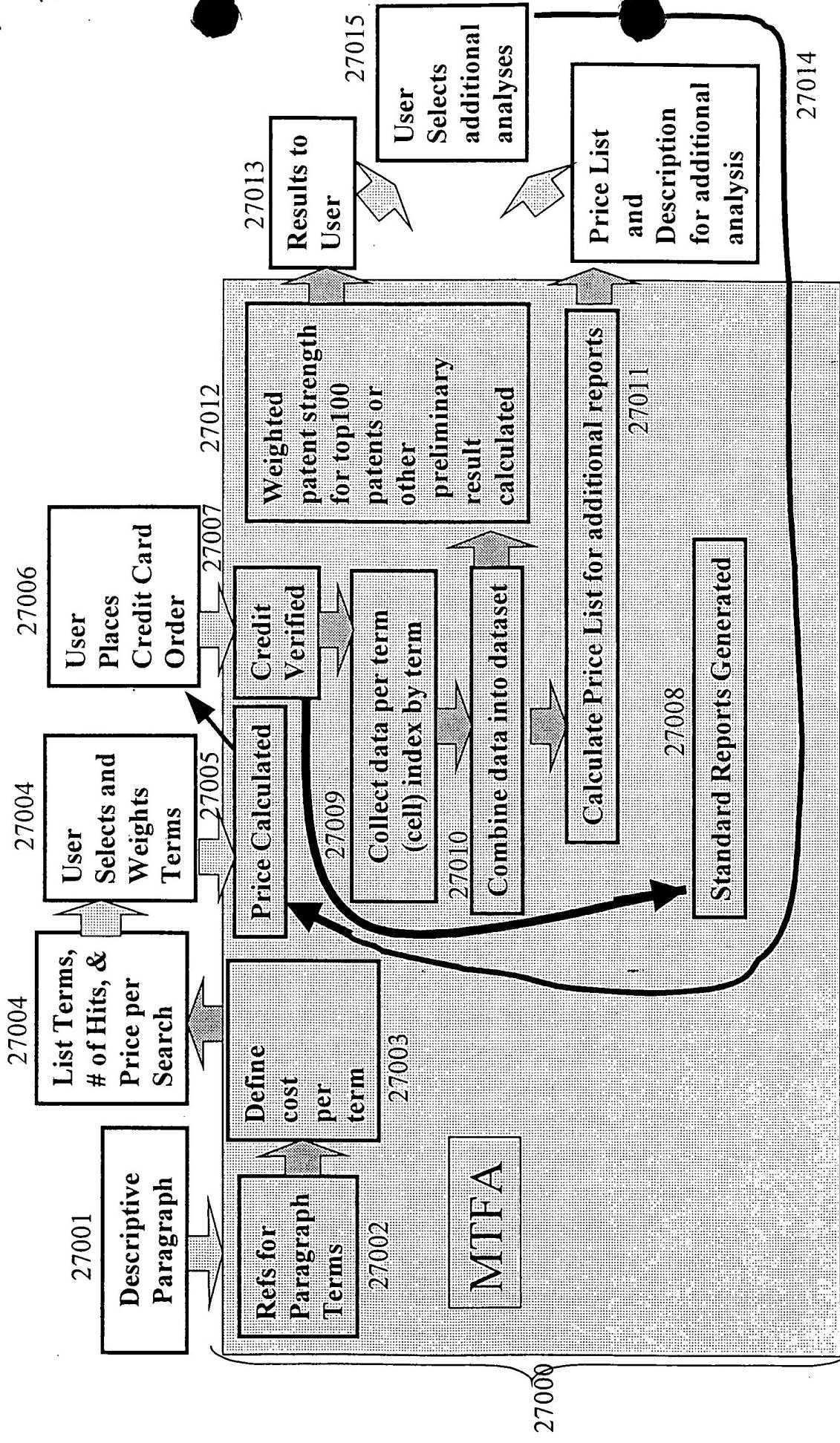


Fig. 27

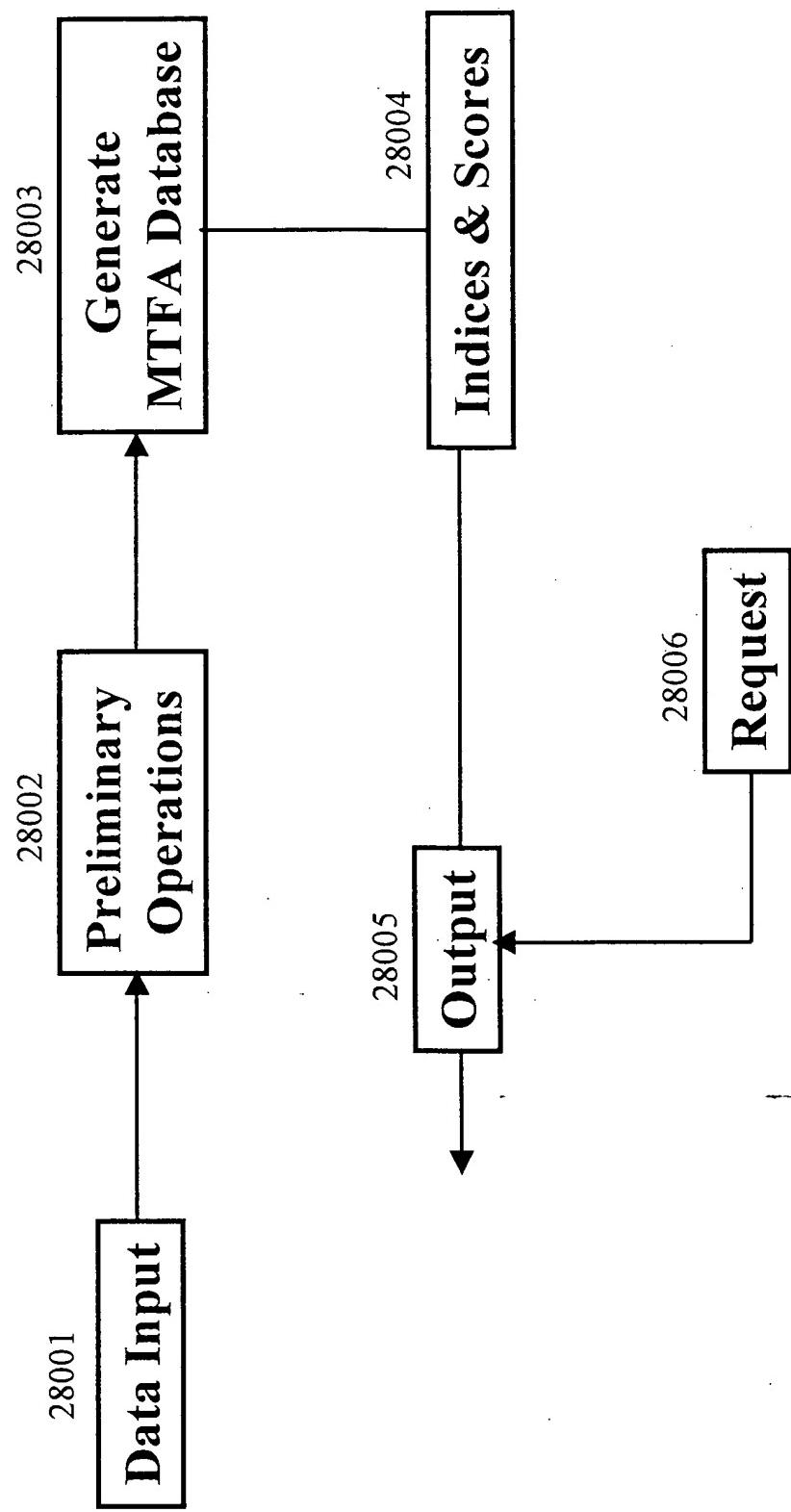


Fig. 28

MTFA Altitude

All Information 29001

Strategic or Tactical Question

29004

29003

29005

	1	2
A	1000	150
B	20,000	12,000

29006
25,000 Records

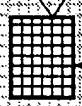
Limiting Threadwidth

	1	2
A	300	50
B	4,000	2,200

29008
5,000 Records

29009
1
3

29010
500
Records



MTFA selects a small field about which to build a landscape relevant to a decision

Figure 29